

IN THE CLAIMS

Amendments To The Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. An ultrasonic diagnosis apparatus, comprising:
 - first storage means for storing digital reception beam data converted from a reception beam formed from an ultrasonic received signal;
 - first control means for controlling reading and writing of data from/in the first storage means;
 - a filter coefficient calculation portion for calculating a filter coefficient based on information on the reception beam, the information including a positional relationship between the reception beam and a transmission beam; and
 - a first spatial filter operation portion for subjecting each of a plurality of the reception beam data including the reception beam data of converted from parallel reception beams received in parallel from a single transmission beam to filtering processing for reducing a difference in image quality between adjacent beams based on the filter coefficient, thereby outputting image data,
 - wherein the image data output from the first spatial filter operation portion are converted into scanning of a display monitor so as to display an image on the display monitor,
in order to generate the image data at a specified sampling point on one target reception beam, the first spatial filter operation portion performs the filtering of the reception beam data converted from the reception beams including the target reception beam and the adjacent plural reception beams, and
the filter coefficient calculation portion applies the filter coefficient to the reception beam datum converted from the parallel reception beam received in parallel with the target reception beam so as to be smaller than the filter coefficient applied to the reception beam data which is converted from the reception beam other than the parallel

reception beam and is symmetrical in positional relationship to the reception beam data with respect to a center at a position of the target reception beam.

2. (Currently Amended) The ultrasonic diagnosis apparatus according to claim 1, further comprising:

a two-dimensional Doppler signal processing portion for subjecting reception beam data from an ultrasonic reception data processing portion to two-dimensional Doppler processing;

second storage means for storing two-dimensional Doppler data output from the two-dimensional Doppler signal processing portion;

second control means for controlling reading and writing of data from/in the second storage means; and

a second spatial filter operation portion for subjecting each of a plurality of the received two-dimensional Doppler data including data of beams received in parallel from a single transmission beam to filtering processing for reducing a difference in image quality between adjacent beams based on the filter coefficient supplied from the filter coefficient calculation portion.

3. (Previously Presented) The ultrasonic diagnosis apparatus according to claim 1, wherein the filter coefficient calculation portion is able to control the filter coefficient in accordance with a receiving depth.

4. (Previously Presented) The ultrasonic diagnosis apparatus according to claim 1, wherein the filter coefficient calculation portion is able to control the filter coefficient in accordance with an angle of the reception beam.

5. (Previously Presented) The ultrasonic diagnosis apparatus according to claim 1, wherein the filter coefficient calculation portion is able to control the filter coefficient in accordance with a focal position of the transmission beam.